

**What is claimed is:**

1. A digital thermometer for measuring the temperature of a living being by inserting a portion of the thermometer in the mouth of the being comprising:

a probe with first and second ends and an intermediate portion of the probe disposed between the first and second ends, the intermediate portion having a non-linear shape,

a temperature sensor disposed near the first end of the probe,

a housing portion, separate from the probe and having a display for displaying a temperature measured by said thermometer, and

electronic circuitry, within said housing, in communication with said temperature sensor to receive a temperature signal from said temperature sensor, to translate said temperature signal into a value representative of the temperature measured by the temperature sensor, and to communicate the translated value to the display for displaying the measured temperature.

2. The thermometer of claim 1 wherein the intermediate portion is fixed in the non-linear shape.

3. The thermometer of claim 1 wherein the intermediate portion is moveable between the non-linear shape and a substantially linear shape.

4. The thermometer of claim 2 wherein the non-linear shape comprises a curve of constant radius.

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5. The thermometer of claim 3 wherein the probe includes a material selected to enable the intermediate portion to remain in a shape to which it is moved until it is moved to another shape.

6. The thermometer of claim 5 wherein the material comprises a stiffening core.

7. The thermometer of claim 6 wherein the core comprises a wire.

8. The thermometer of claim 6 wherein the core comprises a segmented stiffening member.

9. The thermometer of claim 5 wherein the material comprises a bendable polymer.

10. The thermometer of claim 1 wherein the housing includes a chamber configured to store a plurality of probe covers.

11. ~~12.~~ The thermometer of claim 10 wherein the chamber includes an opening configured to receive the probe so that the probe may be inserted into one of the probe covers in the chamber, and the probe and probe cover pulled from the chamber.

12. ~~13.~~ The thermometer of claim 3 wherein the housing includes a portion configured to allow a user to move the probe between its linear and non-linear shapes without the user contacting the probe with his or her fingers.

13. ~~14.~~ The thermometer of claim ~~13~~<sup>12</sup> wherein the portion comprises a slot into which the probe can be partially inserted.

- 14 15. The thermometer of claim 1 wherein the probe includes a relatively hard core and a relatively softer polymeric sheath, the sheath enclosing the core and being exposed for contact with a patient's mouth.
- 15 16. The thermometer of claim 1 wherein the display is pivotably mounted on a portion of the housing.
- 16 17. The thermometer of claim 1 further comprising a control button mounted in the vicinity of the probe.
- 17 18. The thermometer of claim 1 wherein the probe is connected to the housing by a cord.
- 18 19. The thermometer of claim 17 wherein the housing is configured to allow the cord to retract into the housing when the thermometer is not in use.
- 19 20. The thermometer of claim 18 further comprising an actuator configured to allow the user to control the retraction of the cord.
- 20 21. The thermometer of claim 18 wherein the housing includes a chamber configured to store the probe.
- 21 23. The thermometer of claim 10 wherein the chamber is configured to receive a replaceable probe cover cartridge.
- 22 24. A digital thermometer for measuring the temperature of a living being by inserting a portion of the thermometer in the mouth of the being comprising:

a probe with first and second ends, and an intermediate portion of the probe disposed between the first and second ends,

a temperature sensor disposed near the first end of the probe,

the intermediate portion of the probe being configured to be bent into a desired non-linear shape,

a housing portion separate from the probe and having a display for displaying a temperature measured by said thermometer, and

electronic circuitry in communication with said temperature sensor to receive a temperature signal from said temperature sensor, to translate said temperature signal into a value representative of the temperature measured by the temperature sensor, and to communicate the translated value to the display for displaying the measured temperature.

23 25. The digital thermometer of claim 22 wherein said probe includes an exterior portion formed from a relatively soft material and an internal stiffening element formed from a relatively harder material.

24 26. The digital thermometer of claim 23 wherein said internal stiffening element comprises a malleable metal.

25 27. The digital thermometer of claim 22 wherein said probe is formed from a ductile polymer with low elasticity that permits shaping of the intermediate portion of the probe into a desired non-linear shape.

26 28. The digital thermometer of claim 22 wherein said intermediate portion of said probe is linear prior to being shaped into said non-linear shape.

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27 29. The digital thermometer of claim 24 wherein said  
intermediate portion of the probe is shaped to rest on the  
lower lip and/or teeth of the being.